UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK
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UNITED STATES OF AMERICA   :

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             -against-   :   MEMORANDUM & ORDER

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GREG CANTONI,   :   18-cr-562 (ENV)

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                      Defendant. :
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VITALIANO, D.J.

Defendant Greg Cantoni moves on another front to bar the government from offering a category of evidence at his upcoming bank robbery trial. This time, he seeks to exclude the testimony of government experts regarding latent print analysis, pursuant to Rule 702 of the Federal Rules of Evidence. He contends that the method used by the latent print examiners is not sufficiently reliable as applied to this case. For the reasons that follow, the motion is granted in part and denied in part.

Background

Among the evidence the government has produced is a demand note recovered from one of the banks Cantoni allegedly robbed. (*See* Def. Br. at 1, ECF No. 24-2). The government intends to call three examiners from the New York City Police Department ("NYPD") Latent Print Section ("LPS") to testify to their conclusion that the palm print found on this note matched Cantoni's palm print. Cantoni has moved to exclude the government's proffered expert testimony. (Mot., ECF No. 24). In the alternative, he seeks a court order directing the LPS examiners to limit their testimony and to provide certain details about the limitations of latent print examination, and hopes to present his own expert, Dr. Simon Cole, to discuss these limitations.

Legal Standard

The admissibility of expert opinion testimony is governed by Rule 702 of the Federal

Rules of Evidence, as well as *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 113

S. Ct. 2786, 125 L. Ed. 2d 469 (1993). Rule 702 permits "[a] witness who is qualified as an

expert" to "testify in the form of an opinion or otherwise if" (a) the expert's specialized

knowledge will help the jury "to understand the evidence or to determine a fact in issue," (b) "the

testimony is based on sufficient facts or data," (c) "the testimony is the product of reliable

principles and methods," and (d) "the expert has reliably applied the principles and methods to

the facts of the case." Fed. R. Evid. 702.

This requires district courts to undertake "a preliminary assessment of whether the

reasoning or methodology underlying the testimony is scientifically valid and of whether that

reasoning or methodology properly can be applied to the facts in issue." *Daubert*, 509 U.S. at

592-93. The inquiry is "a flexible one," *id.* at 594, and is designed to ensure that an expert's

testimony "rests on a reliable foundation and is relevant to the task at hand," *id.* at 597. Among

the factors a court may consider are whether the methodology (1) can be or has been tested, (2)

has been subjected to peer review, (3) has a known error rate, (4) has controlling standards, and

(5) has gained general acceptance in the scientific community. *Id.* at 593-94. Although the

Daubert standard is more liberal than its predecessor, which focused solely on "general

acceptance," the standard is not intended to "result in a 'free-for-all'" because "[v]igorous cross-

examination, presentation of contrary evidence, and careful instruction on the burden of proof

are the traditional and appropriate means of attacking shaky but admissible evidence." *Id.* at

595-96. Finally, "[i]n addition to the requirements of Rule 702, expert testimony is subject to

Rule 403, and 'may be excluded if its probative value is substantially outweighed by the danger

of unfair prejudice, confusion of the issues, or misleading the jury.'" *Nimely v. City of New York*, 414 F.3d 381, 397 (2d Cir. 2005) (quoting Fed. R. Evid. 403).

<div align="center">Discussion</div>

I.   Motion to Exclude Expert Testimony

Cantoni seeks to exclude the testimony of the LPS examiners on the ground that they did not follow established protocols for latent print examination. Like most police fingerprint laboratories, however, the NYPD LPS lab uses the ACE-V approach to print analysis. (*See* Def. Br. at 5). Under this approach, an examiner first *Analyzes* the latent print to assess its quality and usefulness. Second, the examiner *Compares* the latent print to a known print and documents any similarities and differences. At the third step, the examiner *Evaluates* the similarities and determines whether he can conclude that the prints came from a common source, relying on his judgment and experience. At the last step in the analysis, a different examiner *Verifies* the first examiner's conclusion.

Throwing incense in Caesar's face, Cantoni presents a variety of recent government reports indicating that the ACE-V method is not foolproof and may generate unreliable results, particularly given its dependence on subjective assessments by examiners. (*Id.* at 5-9).[1]

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[1] These reports include William Thompson *et al.*, *Forensic Science Assessments: A Quality and Gap Analysis of Latent Fingerprint Analysis* (2017), https://www.aaas.org; Executive Office of the President, President's Council of Advisors on Sci. & Tech., *Forensic Science in Criminal Courts: Ensuring Scientific Validity of Feature-Comparison Methods* (2016), https://obamawhitehouse.archives.gov/sites/default/files/microsites/ostp/PCAST/pcast_forensic_science_report_final.pdf ("PCAST Report"); Nat'l Inst. of Sci & Tech., *Latent Print Examination and Human Factors: Improving the Practice Through a Systems Approach* (2012), https://nvlpubs.nist.gov/nispubs/ir/2012/NIST.IR.7842.pdf; and U.S. Dep't of Justice, Office of the Inspector General, *A Review of the FBI's Handling of the Brandon Mayfield Case* (2006), https://oig.justice.gov/special/s0601/final.pdf. The parties do not dispute the briefs' characterizations of the contents of these reports, and, consequently, for the sake of brevity, any references to the contents of these reports are cited to the briefs.

Specifically, he focuses on a five-step process for ACE-V analysis proposed in the report of the President's Council of Advisors on Science and Technology ("PCAST"). This process requires that latent print examiners (1) have undergone proficiency testing, (2) disclose whether they have analyzed the latent print before comparing it to the known print, (3) document their comparison of the prints' features, (4) disclose the existence of other facts that could have influenced their conclusion, and (5) verify that the latent print is comparable in quality to those prints used in certain foundational studies of latent print analysis. (*Id.* at 12). These steps are designed to mitigate the effects of bias that may be introduced by ACE-V's reliance on fingerprint examiners' personal experience and subjective impressions.

Although the NYPD examiners have undergone proficiency testing, Cantoni contends that the case file does not reveal that any of the other steps recommended by PCAST were taken in the analysis of the subject print. (*Id.* at 14). The government, however, notes several screenshots that document, in some detail, the points of comparison relied upon by the examiners, which may obviate some of Cantoni's concerns. (Gov't Br. at 21-23, ECF No. 29). Regardless, assuming without deciding that the analysis did not meet the standards recommended in the PCAST report, the analysis makes clear that LPS followed the ACE-V procedure, a procedure that the PCAST report deemed "scientifically valid and reliable," *United States v. Lundi*, No. 17-cr-388 (DLI), 2018 WL 3369665, at *3 (E.D.N.Y. July 10, 2018) (alterations adopted) (internal quotation marks and citation omitted). Indeed, an addendum to the PCAST report "concluded that 'there was clear empirical evidence' that 'latent fingerprint analysis [. . .] method[ology] met the threshold requirements of "scientific validity" and "reliability" under the Federal Rules of Evidence.'" *United States v. Pitts*, No. 16-cr-550 (DLI), 2018 WL 1116550, at *4 (E.D.N.Y. Feb. 26, 2018) (alterations in original) (quoting Addendum

to the PCAST Report on Forensic Science in Criminal Courts).

Moreover, even if, *arguendo*, LPS did not meet the gold standard for latent print analysis, the Court cannot conclude that the proffered experts failed to "reliably appl[y] the principles and methods [of ACE-V] to the facts of the case," Fed. R. Evid. 702(c). Although NYPD's methods may have been imperfect and may not have delivered scientifically certain results, there is no indication that they were so fundamentally unreliable as to preclude the testimony of the experts. At best, Cantoni's submission shows certain ways in which cognitive bias may have affected the NYPD examiners' analysis but does not show that it actually did so or that any cognitive bias was so significant as to produce an erroneous conclusion. Defendant's concerns are fodder for cross-examination rather than grounds to exclude the latent print evidence entirely. This is the approach that has been adopted each time courts in this district have considered similar motions. *See, e.g., Lundi*, 2018 WL 3369665, at *3; *Pitts*, 2018 WL 1116550, at *4-5. As discussed above, *Daubert*'s liberal standard for the admission of expert testimony reflects the Supreme Court's view that "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." *Daubert*, 509 U.S. at 596. As a result, rather than exclude the testimony, the Court will allow Cantoni to draw out the weaknesses of the analysis on cross-examination.

II. Proposed Requirements Regarding Expert Testimony

Recognizing the possibility that the Court would permit the government's experts to testify, Cantoni requests, in the alternative, that the Court require that the LPS examiners acknowledge that the certainty of their conclusion is limited by the highest potential false positive rate from empirical studies and that the government acknowledge, through the

examiners or by stipulation, that studies have found the error rate to be as high as 1 in 18 or 1 in 306. (Def. Br. at 16). To the extent that Cantoni seeks to mandate particular testimony by government witnesses, the motion is denied. Cross-examination is the appropriate means to elicit weaknesses in direct testimony. The government suggests that the studies Cantoni cites are inapposite because they involved the Federal Bureau of Investigation and the Miami-Dade Police Department. (Gov't Br. at 34). However, because each of these laboratories uses the ACE-V method of the NYPD lab and because the government itself has relied on these studies for confirmation that ACE-V is reliable, Cantoni may explore the error rates generated by the studies on cross-examination.

Cantoni also moves to preclude the government experts from testifying that their conclusion is certain, that latent print analysis has a zero error rate, or that their analysis could exclude all other persons who might have left the print. The government acknowledges that "[t]he language and claims that are of concern to defense counsel are disfavored in the latent print discipline," (id. at 33), and that "absolute[]ly] certain opinions" and identifications "to the exclusion of all others" are "[n]ot [a]pproved for [l]atent [p]rint [e]xamination [t]estimony," (id. at 16). Consequently, Cantoni's request to preclude such testimony is granted without opposition.

III.   Defendant's Proposed Expert

Lastly, Cantoni seeks to present the expert testimony of Dr. Simon Cole, and the government, in its response, requests an order precluding Dr. Cole's testimony. (See id. at 35). Dr. Cole is a "Professor of Criminology, Law & Society at the University of California, Irvine," with expertise in "the sociology of forensic science and the development of criminal identification databases and biometric technologies." (Def. Br. at 3). He is prepared to offer

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three opinions.

First, he seeks to opine that "there is now consensus in the scientific and governmental community that categorical conclusions of identification – such as the one made in this case – are scientifically indefensible." (*Id.*). In light of the Court's above order precluding claims that Cantoni was the certain source of the subject print or that latent print analysis has a zero error rate, this opinion will not be helpful to the jury and does not pass muster under Rule 702(a). Additionally, this opinion goes to whether the latent print analysis conducted was reliable, which is a question for the Court and has been answered in the affirmative, in light of the PCAST report and its addendum.

Second, Dr. Cole seeks to testify that "the latent print examiner in Mr. Cantoni's case failed to account for the increased probability of a mismatch as a result of the use of an automated print identification system." (Def. Br. at 3). This is a matter that may be explored on cross-examination rather than via a competing expert. Dr. Cole's analysis does not appear to involve the application of any "scientific, technical, or other specialized knowledge," Fed. R. Evid. 702, to this case but rather to be a mere reexamination of the NYPD case file in light of several prominent studies. Because defendant may cross-examine the government's experts with regard to the use of an automated system and the studies discussed above, there is no need for Dr. Cole to discuss the risk of error created by the automated system. This conclusion is reinforced by the fact that Dr. Cole nowhere opines that someone other than Cantoni was the source of the subject print or even undertakes an independent comparison of the subject print to Cantoni's prints.

Finally, Dr. Cole is prepared to testify that "only two studies of latent print identification accuracy have been conducted, each of which demonstrated significant error rates in latent print

examination." (Def. Br. at 3). Again, this is a matter that may be explored on cross-examination and does not require an expert to offer an opinion. Indeed, to the extent that Dr. Cole merely plans to convey the contents of studies he did not conduct, he is poised to act as a conduit for hearsay, which is a prohibited role for an expert. *See, e.g., Williams v. Illinois*, 567 U.S. 50, 80, 132 S. Ct. 2221, 183 L. Ed. 2d 89 (2012); *see also* Fed. R. Evid 703. Cantoni is concerned that the government's experts may not be familiar with the studies discussed above and, therefore, may not be able to answer questions about them. However, the impeachment value of the examiners' unawareness of the studies would be significant and, consequently, cross-examination offers an adequate opportunity to impugn the examiners' conclusions, regardless of the depth of their knowledge. Therefore, although this case is distinguishable from *Lundi*, where the court concluded that the government's experts would actually be familiar with the studies, 2018 WL 3369665, at *4, the distinction is not enough to justify expert testimony from Dr. Cole.

Overall, Dr. Cole's opinions appear to be directed at NYPD's methods for latent print analysis in general rather than specific issues in this case. Although he does highlight particular flaws in the analysis conducted by the government's experts, he does not thereby conclude that NYPD's conclusions were erroneous or that the process used was fundamentally unreliable. His testimony, therefore, would be unlikely to aid the jury.

Conclusion

For the foregoing reasons, defendant's motion is granted to the extent that he may cross-examine the government's experts on the error rate of latent print analysis, and the government's experts will be precluded from testifying that their conclusions were certain, but defendant's requests to exclude the government's proffered expert testimony, to mandate particular testimony by the government's experts, and to introduce the testimony of Dr. Cole are denied.

So Ordered.

Dated: Brooklyn, New York
      March 19, 2019

                                 /s/ Hon. Eric N. Vitaliano

                                 ERIC N. VITALIANO
                                 United States District Judge